

Date: Mon, 7 Mar 94 04:30:40 PST
From: Ham-Homebrew Mailing List and Newsgroup <ham-homebrew@ucsd.edu>
Errors-To: Ham-Homebrew-Errors@UCSD.Edu
Reply-To: Ham-Homebrew@UCSD.Edu
Precedence: Bulk
Subject: Ham-Homebrew Digest V94 #52
To: Ham-Homebrew

Ham-Homebrew Digest Mon, 7 Mar 94 Volume 94 : Issue 52

Today's Topics:

 GPS Receiver Boards
 Help understanding FM and SSB
 Looking for Lex...
 Need info on Toshiba TC571000D-20 EPROM
 Power FET Gate Modulation - Need Info
 Ramsey SA-7 broadband preamp
 Tuner-tuner

Send Replies or notes for publication to: <Ham-Homebrew@UCSD.Edu>
Send subscription requests to: <Ham-Homebrew-REQUEST@UCSD.Edu>
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Ham-Homebrew Digest are available
(by FTP only) from UCSD.Edu in directory "mailarchives/ham-homebrew".

We trust that readers are intelligent enough to realize that all text
herein consists of personal comments and does not represent the official
policies or positions of any party. Your mileage may vary. So there.

Date: 7 Mar 1994 04:47:08 GMT
From: ihnp4.ucsd.edu!sdd.hp.com!hpscit.sc.hp.com!rkarlqu@network.ucsd.edu
Subject: GPS Receiver Boards
To: ham-homebrew@ucsd.edu

The Motorola GPS receiver is less than \$150 in 100's. It has six
channels and just about all the features you would ever want.

Rick Karlquist N6RK
rkarlqu@sdd.hp.com

Date: 1 Mar 94 15:59:24 GMT
From: agate!usenet.ins.cwru.edu!howland.reston.ans.net!pipex!warwick!not-for-
mail@ucbvax.berkeley.edu

Subject: Help understanding FM and SSB
To: ham-homebrew@ucsd.edu

I've read the RSGB's RAE manual, and still have difficulty with their descriptions of FM and SSB. In FM, as I understand, the frequency of the carrier is modulated by the amplitude of the speech. So why does the bandwidth of the RF signal matter? If you have, say a 28Mhz carrier and the bandwidth of the Rf signal is 5kHz, why should that limit the audio bandwidth to 5Khz? If you send a 20kHz audio signal surely the RF signal would just oscillate between 28Mhz+-5kHz at 20kHz? I realise that filtering the output is important to remove any harmonics, but as you can see I'm quite confused about the bandwidth issue.

The other thing is SSB. I get the general idea of using power more efficiently by sending half the audio waveform as the other half is going to be a mirror image, and removing the carrier as we want to concentrate power on the signal instead of the carrier. What I don't get is how one removes the carrier and then adds it back again. Can someone explain that, please?

Cheers,
Jason

--

Jason L Saunders - President, Warwick Thrash n' Burn Society
email: maupb@csv.warwick.ac.uk - PGP 2.2 key available on request
snail: 57 Gordon Street, Earlsdon, Coventry CV1 3ET, ENGLAND
"At least you know a sicko's committed"

Date: 3 Mar 94 18:08:27 GMT
From: ihnp4.ucsd.edu!usc!cs.utexas.edu!convex!news.utdallas.edu!wupost!udel!
news.sprintlink.net!connected.com!beauty!rwing!eskimo!mzenier@network.ucsd.edu
Subject: Looking for Lex...
To: ham-homebrew@ucsd.edu

In <60290@uugate.wa7slg.ampr.org>, ka7oei@uugate.wa7slg.ampr.ORG wrote:
: I'm looking for a Lexical Analyzer for DOS.
: How about a 'port of "lex"? Does anyone know where one may be found?

In my travels, I've run across at least 3 versions of Lex implemented in C. (And another that does Turbo Pascal.)

First, there's AT&T Lex. You can't get the source to this.
(A version of AT&T Yacc was out, but AT&T sicced their lawyers on people. No bit deal, Bison and Byacc are as good or better.)

Next, there's a Lex written at University of Waterloo (by Charles Forsythe?) that was released on a DECUS souce code tape.

It has an incompatible source language format. This was available as a port to DeSmet C (a now obsolete "classic" ie. Version 7 level compiler) from the C Users Group, sold (for a while) by the Austin Code Works, and is (I think) the lex in the MSDOS/C directory in the Simtel echos sites C.

Finally, there's Flex. This is a souped up Lex written at UCB that is the most common. It gains its performance improvement at the expense of radically incompatible file input compared to AT&T Lex, but as it's now the defacto standard, this is the route to take. Available in the TXTUTL, GNUISH and DJGPP directories under MSDOS on a Simtel echo. Also just about every where else (Linux release, C Users Group, Austin Code Works, and wherever comp.sources.misc is archived).

Mark Zenier mzenier@eskimo.com markz@ssc.com

Date: 5 Mar 94 19:55:41 GMT
From: nprdc!ihnp4.ucsd.edu!swrinde!cs.utexas.edu!convex!darwin.sura.net!rouge!
agh0792@network.ucsd.edu
Subject: Need info on Toshiba TC571000D-20 EPROM
To: ham-homebrew@ucsd.edu

I am working with a system that uses a TOSHIBA TC571000D-20 EPROM. I was only able to find a National Semiconductor EPROM chip - NM27C010Q200. The latter is a 1 meg (128Kx8) CMOS EPROM 200 ns. I was told that this chip would work as a substitute for the Toshiba chip. Can anyone verify that? I have the pin-out for the National Semiconductor chip. Does anyone have the pin-out / other info for the Toshiba Chip?

Thanks in Advance.
I need to know the answer this weekend if possible.
Regards,
aghill@usl.edu
p.s. the chips each have 32 pins.

.

Date: 6 Mar 1994 17:20:54 -0800
From: nntp.crl.com!crl.crl.com!not-for-mail@decwrl.dec.com
Subject: Power FET Gate Modulation - Need Info
To: ham-homebrew@ucsd.edu

I would appreciate any information on the use of power type FETS (Hexfet, TMOS, etc.) in AM transmitter applications. I have some references for this but they are rather incomplete, I am particularly interested in gate modulation techniques to eliminate the sereis type modulator.

Thanks

Stephen Dunifer

Date: 5 Mar 1994 10:30:25 GMT
From: ihnp4.ucsd.edu!usc!howland.reston.ans.net!usenet.ins.cwru.edu!
cleveland.Freenet.Edu!eb795@network.ucsd.edu
Subject: Ramsey SA-7 broadband preamp
To: ham-homebrew@ucsd.edu

Hello.

I would like to know if any of you here on r.r.a.h have assembled and used the Ramsey SA-7 preamp.
I am planning to get a few of them and use them for TV and FM DX.
I will have one for FM, one for UHF, and one for VHF.
I have three seperate antennas for those bands, and seperate feed lines too.

Will it be difficult to design a filter system where only the desired band(ie FM, or UHF TV) get amped by the SA-7?

I plan on buying three of them, and I would like to know what I am getting into before I plunk down the \$\$\$.

By the way, here are some specs:

freq range:100kHz to 1000mHz
gain:>20dB
noise figure: < 4dB
NEC microwave transistors are used in the design.
They are \$14.95 each in kit form from Ramsey.
Ramsey is at: (716)924-4560

Thanks.

--

Eric Matthews

eb795@cleveland.freenet.edu

Date: Sat, 5 Mar 1994 15:12:05 GMT
From: ihnp4.ucsd.edu!swrinde!cs.utexas.edu!convex!news.utdallas.edu!wupost!
csus.edu!netcom.com!tgm@network.ucsd.edu
Subject: Tuner-tuner
To: ham-homebrew@ucsd.edu

Richard McAllister (rfm@urth.eng.sun.com) wrote:
: 2. how can I build one? [this is why this is in r.r.a.homebrew and not .misc]

You can build one for about \$10 or so. It is just a variation on a noise bridge. My 1990 ARRL Handbook has a schematic. RadioKit also sells a noise bridge. Or you could get the MFJ noise bridge for about \$50. Set the controls on the noise bridge to 0 reactance and 50 ohms resistance before you tune. I built one from the Ham Radio Magazine articles a few years ago. It really works.

Thomas Ki4N

End of Ham-Homebrew Digest V94 #52
